

RESPONSE

The Applicants hereby respond to the issues raised by the Examiner in the subject office action.

I. Rejection of Claims 1-10 under 35 U.S.C. § 112, first paragraph

Claims 1-10 stand rejected under 35 U.S.C. §112, first paragraph due to improper enablement. The Applicants thank the examiner for pointing out the lack of enablement of “carbon compound.” The Applicant’s intended to utilize the proper element, “carbon particles.” Claim 1 has been duly amended to use the term “carbon particles.” Applicants have also amended the Specification to clearly specify that the inventive method sinters carbon particles and a (thermoplastic binder). Support for both changes can be found in the Background and Detailed Description sections of the Specification, as originally presented.

II. Rejection of Claim 1 under 35 U.S.C. § 112, second paragraph

Claim 1 stands rejected under 35 U.S.C. §112, second paragraph as being incomplete for omitting essential steps. Pursuant to the Examiner’s helpful suggestions, Claim 1 has been amended to first introduce the carbon and thermoplastic mixture into the mold and secondly into the structure between the exterior and interior walls. The Examiner will note that Claim 1 has been further amended to assure proper introduction of elements and antecedent basis in light of the aforementioned amendments involving placement of the mixture into the mold.

Applicants believe that the amendments to Claim 1 address the Examiner’s refusals under Section 112, second paragraph and thus the Claim is allowable. Further, as previously objected Claims 2- 10 now depend on an arguably allowable base claim, they too are now allowable.

III. Additional Amendments

The Applicants wish to draw the Examiner's attention to additional amendments made to the claims which were not necessitated by the instant office action or patentability of the claims.

Claim 1 has been amended to eliminate the word "vicat" and substitute the more accurate concept of elevating the temperature such the polymer softens without melting. Applicants have also removed the duplicate use of the phrase "heated gas" from sub-element e). Finally, sub-element d) has been clarified. It is believed that no new matter has been added and support for these amendments can be found in the Specification.

Claim 4 has been amended to eliminate the nebulous term "ambient atmospheric."

Claim 9 has been amended to clarify that the equation is operable in the absence of heat loss. Support for this addition can be found in the Specification on page 8 as part of the general discussion of the claimed equation.

Conclusion

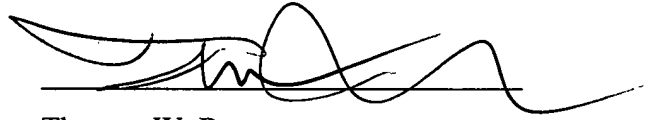
Applicants have responded to the rejections contained in the subject Office Action. The Examiner is invited to contact the undersigned to clarify any additional technical issues or informalities that would otherwise hold up issuance of a patent on this application.

The Applicants would note that there are two outstanding Information Disclosure Statements (PTO 1449) that have not yet been considered and initialed by the Examiner. Applicants believe that the cited references do not anticipate or render obvious the disclosed invention and subject claims and thus impede the issue of a patent grant.

It is not believed that any fees are due in connection with this amendment, but any required payments may be deducted, and any credits refunded, to Deposit Account No. 18-2284.

Respectfully submitted,

DLA PIPER RUDNICK
GRAY CARY US LLP

A handwritten signature in black ink, appearing to read 'Thomas W. Ryan', is written over a horizontal line.

Thomas W. Ryan
Reg. No. 43,072
Telephone: (312) 368-4058

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